

What Is Claimed Is:

1. A method for representing a distributed software application comprising:

5 determining at least one distributed application, the application including the
collective behavior of at least one computing entity, wherein each computing entity is
associated with at least one resource;

 storing at least one application descriptor, wherein the application descriptor
describes the association between each of the at least one computing entity participating
in the application and each of the respective resources;

10 providing access to the application descriptor in order to facilitate administration
of the distributed software application.

2. The method according to claim 1, wherein the application descriptor is stored at a
network node, the network node performing administrative tasks with respect to the
15 distributed application.

3. The method according to claim 1, wherein the application descriptor is used for at
least one of configuration, deployment of the distributed application.

20 4. The method according to claim 1, wherein the distributed application is installed on a
network including an application server, a middleware server and a mobile device.

5. A method for representing a software application operating within a mobile
environment, the mobile application including the collective behavior of a mobile device
25 a middleware server and a backend server comprising:

 specifying a behavior for the mobile device;

determining at least one first resource to be associated with mobile device, at least one second resource to be associated with the middleware server and at least one third resource to be associated with the backend server as a function of the specified behavior for the mobile device;

5 storing an application descriptor, the application descriptor describing the association between the first resource, the second resource, the third resource and, respectively, the mobile device, the middleware server and the backend server.

6. The method according to claim 5, wherein the application descriptor is stored at a
10 network node, the network node performing administrative tasks with respect to the distributed application.

7. The method according to claim 5, wherein the application descriptor is used for at least one of configuration, deployment of the distributed application.

15

8. The method according to claim 5, wherein the at least one first resource, the at least one second resource and the at least one third resource are deployed to at least one of the mobile device, the middleware server and the backend server as a function of the application descriptor.

20

9. A data structure for representing a distributed software application, the data structure including:

a unique identifier for representing a distributed software application;

at least one identifier specifying at least one computing entity to participate in the
25 distributed software application;

at least identifier specifying at least one resource;

an association between each of the at least one computing entity and the at least one resource.

10. A system for administering a distributed software application including the collective behavior of a plurality of computing entities within a network comprising:

5 a server including a processor, said processor performing at least one of deploying, configuring and updating the distributed application with respect to the computing entities within the network;

10 a database for storing at least one application descriptor, the application descriptor representing an association between at least one distributed application, computing entities participating in the application and resources to be associated with the computing entities;

at least one administrative module, the administrative module performing administration tasks for the application with respect to the computing entities participating in the application.

15 11. The system according to claim 10, wherein the administrative tasks include at least one of configuration, deployment of the distributed application.

12. A program storage device, said program storage device including instructions for representing a distributed software application comprising:

20 determining at least one distributed application, the application including the collective behavior of at least one computing entity, wherein each computing entity is associated with at least one resource;

25 storing at least one application descriptor, wherein the application descriptor describes the association between each of the at least one computing entity participating in the application and each of the respective resources;

providing access to the application descriptor in order to facilitate administration of the distributed software application.

13. The program storage device according to claim 12, wherein the application descriptor is stored at a network node, the network node performing administrative tasks with respect to the distributed application.
- 5 14. The program storage device according to claim 12, wherein the application descriptor is used for at least one of configuration, deployment of the distributed application.
- 10 15. The program storage device according to claim 12, wherein the distributed application is installed on a network including an application server, a middleware server and a mobile device.